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EXAMINER	
SCHILLER, ALINA	

ART UNIT	PAPER NUMBER
3671	

MAIL DATE	DELIVERY MODE
12/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,001	LAVERMAN ET AL.	
	Examiner	Art Unit	
	Alina Schiller	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 April 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/22/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "51" has been used to designate both the deck upper surface (in Figs. 2 and 3) and a flange (in Figs. 5a and 7); reference character "52" has been used to designate both eyes and an area (in Fig. 5a). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "63" and "83" have both been used to designate a sleeve (Fig. 5b). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the

changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "831" (in page 9, line 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: the proper headings ("Field of Invention", "Background", Summary", etc.) are missing; in page 3, line 1, the phrase "claims 18-20" should be revised, since there are only 15 claims; [0021], line 7, the phrase "upper surface" should be added before "51" or "51" replaced with "5"; [0028], lines 1, 3 and 4, "88" should be "89"; [0030], lines 10 and 11, reference characters "83" and "63" have both been used to designate a sleeve; [0021], lines 5,

[0022], lines 3 and 6, etc, reference character "51" has been used to designate the deck upper surface, while in [0030], lines 8-10, it was used to designate flanges; [0030], line 11, reference character "52" has been used to designate eyes, while in [0031], line 8, it was used to designate an area; [0034], the use of metric (SI) units (e.g., 1.2 and 2.5 mm; 1.5 and 1.9 mm, etc.) should be followed by the equivalent English units (MPEP 608.01[R-5]IV).

Appropriate correction is required.

Claim Objections

5. Claim 1 is objected to because of the following informalities: the limitation "pivotable relative to a position in line with the deck upper surface, to both one side and the other side" (lines 8-10) is unclear. Appropriate correction is required. Examiner suggests replacing the above limitation with "pivotable above and below to a position in line with the deck upper surface".

6. Claims 7 and 8 are objected to, because the limitation "surface" is too vague, and it is uncertain if it refers to the pivot element upper surface, or lip upper surface or deck upper surface. Appropriate correction is required to improve clarity.

7. Claim 9 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only--, and/or, --cannot depend from any other multiple dependent claim. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

The omitted structural cooperative relationships are the relationships or functions being performed by keeping the lip upper surface at a substantially fixed angle with respect to the platform (claim 2), having the maximum overall pivoting range of the lip in the order of 14 degrees (claim 10), and having the deck plate in operative position at an angle of at most 7 degrees with the platform (claim 11). It is recommended that applicant amend the claims consistent with the disclosure in [0024], [0025] and [0027].

Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 12, the phrase "for instance" (line 3) renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. **Claims 1, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiSieno et al 6,163,913 in view of FR 1,487,436.**

Regarding claim 1, DiSieno discloses a dock leveller (20, Figs. 5 and 7), comprising:

a deck plate (40) having a deck upper surface, which deck plate is pivotably connectible (as seen in Figs. 5 and 7) with a platform (as seen in the modified picture below);

a lip (48) having a lip upper surface, which lip upper surface, with the deck upper surface, forms at least a part of a transport surface (Abstract; as seen in Figs. 5 and 7); and

a lip hinge construction (as seen in the modified picture below) with a pivot element which pivotably connects an end of the lip and an end of the deck plate of the dock leveler (as seen in the modified picture below), wherein the lip upper surface, through the pivot element, is pivotable below to a position in line with the deck upper surface, (as seen in Fig. 5), and further comprising:

a transmission member (110) for coupling a pivotal movement of the deck plate to a pivotal movement of the lip (as seen in Figs. 5 and 7).

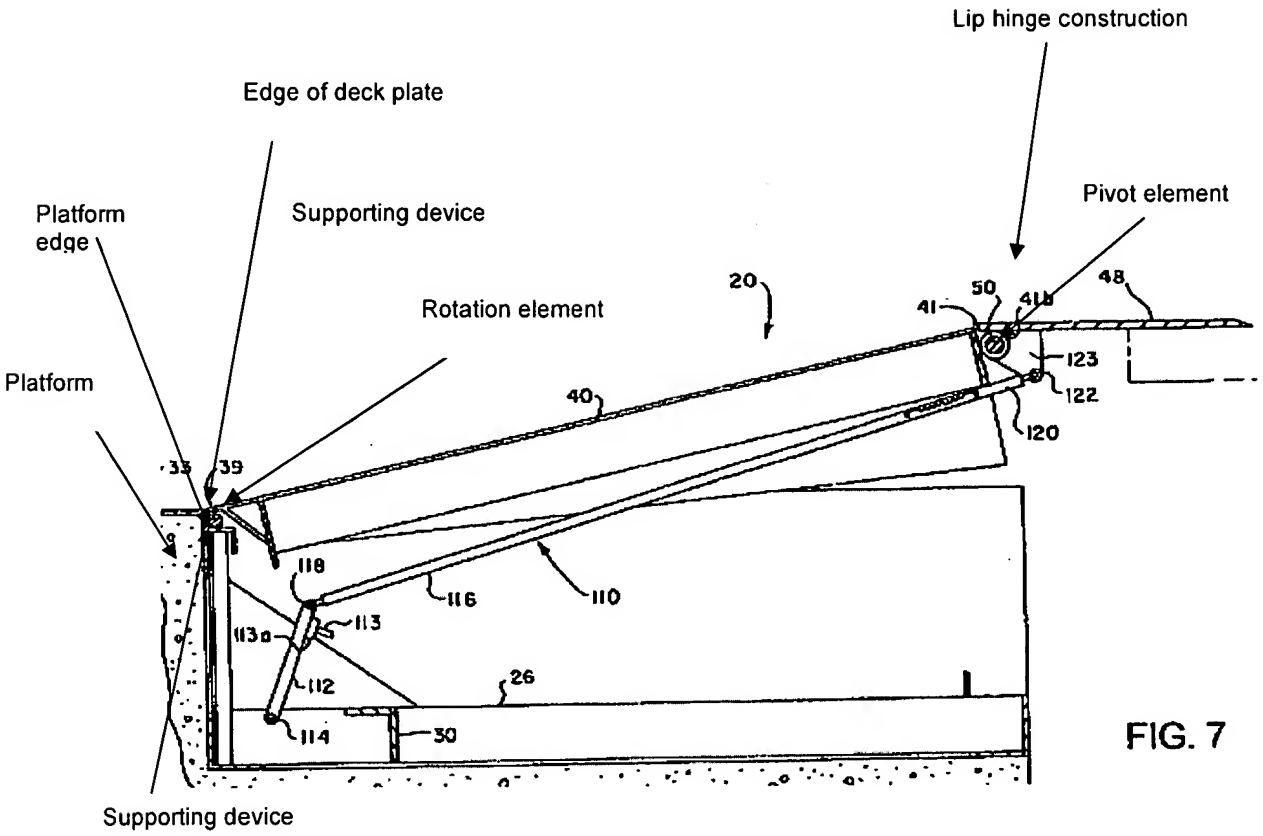


FIG. 7

However, DeSieno fails to disclose that the lip upper surface, through the pivot element, is pivotable above to a position in line with the deck upper surface. FR '436 teaches that it is well known to have a lip with the upper surface being pivotable both below and above to a position in line with the deck upper surface (Fig. 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dock leveler of DeSieno to have the lip rotatable upwardly and upwardly relative to the deck upper surface, as taught by FR '436, since this structure is well known in the art and provides a more versatile deck to lip relationship.

Regarding claim 12 as best understood, DeSieno discloses that the lip upper surface slopes down from the deck to a front end of the lip and in operation is held at a small angle relative to the platform (as seen in Figs. 17 and 18).

Regarding claim 14, DeSieno discloses an extension hinge construction (39), which is connected with an end of the deck plate remote from the lip, and is connectible with a platform edge (as seen in Fig. 7 and modified picture above).

Regarding claim 15, DeSieno discloses that the extension hinge construction comprises:

a deck plate (as seen in Fig. 7), and

a supporting device (as seen in the modified picture above) for operatively supporting an edge of the deck plate on a platform edge (as seen in the modified picture above), at least one rotation element (as seen in the modified picture above) supported by the supporting device and situated near the platform edge, the edge of the deck plate being at least partly supported by the rotation element, and the deck plate being movable relative to the rotation element (as seen in the modified picture above).

11. **Claims 1, 3-5, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merrick et al 3,475,778 in view of FR 1,487,436.**

Regarding claim 1, Merrick discloses a dock leveller (as seen in Figs. 1, 2, 4 and 6), comprising:

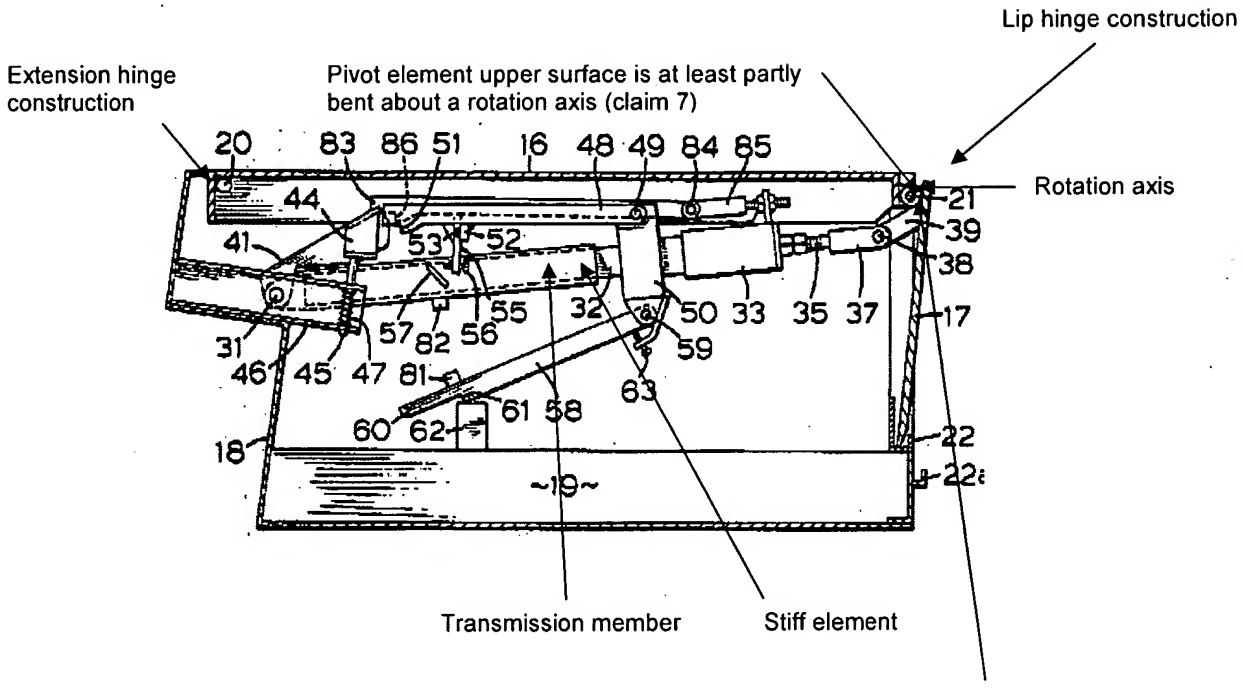
a deck plate (16) having a deck upper surface, which deck plate is pivotably connectible (as seen in Figs. 4 and 6) with a platform (15);

a lip (17) having a lip upper surface, which lip upper surface, with the deck upper surface, forms at least a part of a transport surface (col. 3, lines 10-13; as seen in Fig. 2); and

a lip hinge construction (as seen in the modified picture below) with a pivot element (21) which pivotably connects an end of the lip and an end of the deck plate of the dock leveler (as seen in the modified picture below), wherein the lip upper surface, through the pivot element, is pivotable below to a position in line with the deck upper surface, (as seen in Figs. 7 and 8), and further comprising:

a transmission member (as seen in the modified picture below) for coupling a pivotal movement of the deck plate to a pivotal movemet of the lip (as seen in the modified picture below).

However, Merrick fails to disclose that the lip upper surface, through the pivot element, is pivotable above to a position in line with the deck upper surface. FR '436 teaches that it is well known to have a lip with the upper surface being pivotable both below and above to a position in line with the deck upper surface (Fig. 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dock leveler of Merrick to have the lip rotatable both upwardly and upwardly relative to the deck upper surface, as taught by FR '436, since this structure is well known in the art and provides a more versatile deck-lip relationship.



Regarding claim 3, Merrick discloses that the transmission member comprises: a stiff element (as seen in the modified picture above) which is pivotably connected with the lip and is pivotably connectible with the platform (as seen in the modified picture above).

Regarding claim 4, Merrick discloses that the stiff element comprises an element (30) of variable length (col. 3, lines 74-75; col. 4, lines 1-7). The examiner notes that the phrase "for pivoting a front edge of the lip relative to the rear edge of the lip connected with the pivot element" is for intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior

art. If the prior art structure is capable of performing the intended use, then it meets the claim. It is the examiner position that Merrick's dock leveler is capable of meeting the limitation in claim 4.

Regarding claim 5, Merrick discloses that the element of variable length can comprise a pneumatic or hydraulic cylinder (col. 7, lines 71-75), which is considered to meet the limitation in claim 5.

Regarding claim 12 as best understood, Merrick discloses that the lip upper surface slopes down from the deck to a front end of the lip and in operation is held at a small angle relative to the platform (as seen in Fig. 7).

Regarding claim 13, Merrick discloses that the small angle is coupled to a position of the deck plate and wherein in operation the small angle increases according as the deck plate, viewed from the platform, points down more (as seen in Fig. 8).

Regarding claim 14, Merrick discloses an extension hinge construction (as seen in the modified picture above), which is connected with an end of the deck plate remote from the lip, and is connectible with a platform edge (as seen in the modified picture above).

12. **Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merrick et al 3,475,778 in view of FR 1,487,436, as applied to claim 1 above, and further in view of Muhl et al 7,216,391.**

Regarding claim 6, Merrick as modified by FR '436 discloses a dock leveller as previously set forth, but fails to disclose that the pivot element has an upper surface which is contiguous to the lip upper surface and the deck upper surface. Muhl teaches

that it is well known to have a pivot element with an upper surface contiguous to the two surfaces of the components, which pivot relative to the pivot element (as seen in Fig. 11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dock leveler of Merrick as modified by FR '436 to have the pivot element including an upper surface which is contiguous to the lip upper surface and the deck upper surface, as taught by Muhl, in order to reduce vibration and noise due to gaps between components.

Regarding claim 7, Merrick discloses that the pivot upper surface is at least partly bent about a rotation axis (as seen in the second modified picture above) and the lip and the deck in the coupled condition are rotatable relative to each other about the rotation axis (as seen in the second modified picture above).

Regarding claim 8, Merrick discloses that the pivot upper surface forms at least a portion of an outer surface of a cylinder, and a longitudinal axis of said cylinder coincides with the rotation axis (as seen in the second modified picture above).

13. **Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merrick et al 3,475,778 in view of FR 1,487,436 and Muhl et al 7,216,391, as applied to claims 6-8 above, and further in view of Berends EP 1,264,790.**

Merrick as modified by FR '436 and Muhl discloses a dock leveler as previously set forth, but fails to disclose that the pivot element comprises a hinge element of elastically deformable material. Berends teaches that pivot elements comprising a hinge element of elastically deformable material ([0018], lines 35-37, [0021], lines 1-5) are well known in the art for their ability to be used to selectively adjust the damping properties

and spring constant of the hinge ([0018], lines 40-44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dock leveler of Merrick as modified by FR '436 and Muhl to have the pivot element comprising a hinge element of elastically deformable material, similar to that of Berends, since this structure is well known in the art for the ability to selectively adjust the damping properties and spring constant of the hinge, as taught by Berends.

Allowable Subject Matter

14. **Claims 2, 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.**

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Berends EP 1,264,790 discloses a hinge construction comprising a deck plate and a supporting device for operatively supporting an edge of the deck plate on a platform edge, at least one rotation element supported by the supporting device and situated near the platform edge, the edge of the deck plate being at least partly supported by the rotation element, and the deck plate being movable relative to the rotation element (as seen in Fig. 2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina Schiller whose telephone number is (571)270-3088. The examiner can normally be reached on Mon-Fri, 7:30AM-4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on (571)272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thomas B. Will
Supervisory Patent Examiner
Art Unit 3671

AS
12/21/2007